



Attorney Docket No. 17564-145

**REISSUE APPLICATION DECLARATION BY THE INVENTOR
PURSUANT TO 37 C.F.R. §1.175**

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1/14/02

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name

I believe I am an original, first and joint inventor of the subject matter which is described and claimed in U.S. Patent No. 5,891,212, granted April 6, 1999, and for which a reissue patent is sought on the invention entitled:

**APPARATUS AND METHOD FOR
MAKING UNIFORMLY SIZED AND SHAPED SPHERES**

the specification of which:

- ☒ was filed on **April 6, 2001**, as reissue application **Serial No. 09/827,605**, bearing Attorney Docket No. 17564-145, and was amended by preliminary amendment on April 6, 2001.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability as defined in 37 C.F.R. §1.56.

I verily believe the original patent to be wholly or partly inoperative or invalid by reason of the patentee claiming less than he had the right to claim in the patent.

At least one error upon which reissue is based is described below.

The reissue application is a broadening reissue application. Claims 1 and 16 have been amended to more broadly recite the manner in which the stream of material is broken into spheres and to remove a step of passing of the spheres through an electric field. The amendments merely remove unnecessary limitations from claims 1 and 16. Support for these amendments to claims 1 and 16 is provided in the original disclosure.

Reissue Application Declaration
U.S. Patent No. 5,891,212
Attorney Docket No. 17564-145

All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant. As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith:

Kevin Ainsworth, Registration No. 39,586
Ingrid Beattie, Registration No. 42,306
William Belanger, Registration No. 40,509
Duane Blake, Registration No. 47,279
Naomi Biswas, Registration No. 38,384
Yong Choi, Registration No. 43,324
David F. Crosby, Registration No. 36,400
Brian Dauphin, Registration No. 40,983
Brett N. Dorny, Registration No. 35,860
Marianne Downing Reg. No. 42,870
Ivor R. Elrifi, Registration No. 39,529
Heidi A. Erlacher Reg. No. P-45,409
Christina Gadiano, Registration No. 37,628
Richard Gervase, Registration No. P-46,725
John A. Harre, Registration No. 37,345
Brian P. Hopkins, Registration No. 42,669
Shane Hunter, Registration No. 41,858
David E. Johnson, Registration No. 41,874
Kris Kalidindi, Registration No. 41,461
Christina Karnakis Reg. No. P-45,899
Robert Klauzinski, Registration No. 42,742
Kristin Konzak, Registration No. 44,848
Cynthia Kozakiewicz, Registration No. 42,764
Barry J. Marenberg Reg. No. 40,715
William A. Marino, Registration No. 44,219
A. Jason Mirabito, Registration No. 28,161
Michel Morency, Limited Recognition
Carol H. Peters, Registration No. 45,010
David Poirier, Registration No. 43,007
Michael Renaud Reg. No. 44,299
Brian Rosenbloom, Registration No. 41,276
Robert Sayre, Registration No. 42,124
Thomas M. Sullivan, Registration No. 39,392
Janine Susan, Registration No. 46,119
Howard Susser, Registration No. 33,556

Reissue Application Declaration
U.S. Patent No. 5,891,212
Attorney Docket No. 17564-145

Please address all telephone calls to Thomas M. Sullivan at telephone number 617/348-1661, and all correspondence to:

Thomas M. Sullivan
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
Fax: 617/542-2241

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.

Inventor's Signature
Full Name of Inventor: Jie Tang
Citizenship:
Residence:
Post Office Address:

Date

Gary B. Hess

Inventor's Signature

10-28-02

Date

Full Name of Inventor: Gary B. Hess
Citizenship: U.S.A
Residence: 11122 Stephenson RD. ONsted, MI 49265
Post Office Address:

Inventor's Signature
Full Name of Inventor: Mark D. Muszynski
Citizenship:
Residence:
Post Office Address:

Date

Reissue Application Declaration
U.S. Patent No. 5,891,212
Attorney Docket No. 17564-145

<u><i>Thomas S. Goehring</i></u>	<u>10-23-2002</u>
Inventor's Signature	Date
Full Name of Inventor: Thomas S. Goehring	
Citizenship: <i>United States of America</i>	
Residence: <i>6307 County Farm Road, Jackson, MI 49201</i>	
Post Office Address:	



Express Mail Label No.: ET176342250US
Date of Deposit: December 11, 2002

Attorney Docket No. 17564-145

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First-Named Inventor: Tang, Jie et al.
Assignee: Alpha Metals (Korea) Ltd.
For: APPARATUS AND METHOD FOR MAKING
UNIFORMLY SIZED AND SHAPED SPHERES
Reissue Serial No.: 09/827,605
Filed: April 6, 2001
Original Patent No.: 5,891,212
Original Issue Date: April 6, 1999

Box RESPONSE
Assistant Commissioner for Patents
Washington, D.C. 20231

**OFFER BY ASSIGNEE TO SURRENDER
ORIGINAL PATENT UNDER 37 C.F.R. § 1.178(a)**

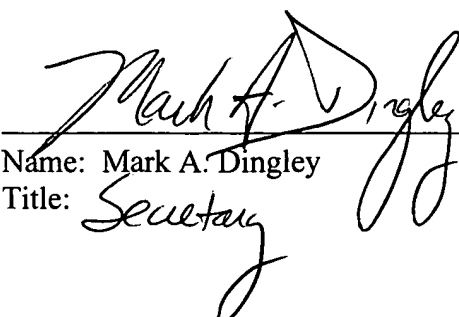
Sir:

The Assignee hereby offers to surrender the original patent identified above as the original patent grant or, if the original patent grant is lost or inaccessible, by a statement to that effect. The Assignee will surrender the original patent on or before the allowance of this application for reissue of the original patent. The undersigned is a person authorized to act on behalf of the Assignee.

Respectfully submitted,

ALPHA METALS (KOREA) LTD.

Date: 10/24/02


Name: Mark A. Dingley
Title: Secretary

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First-Named Inventor: Tang, Jie et al.
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Box RESPONSE
Assistant Commissioner for Patents
Washington, D.C. 20231

**CONSENT OF ASSIGNEE FOR APPLICATION FOR
REISSUE PATENT UNDER 37 C.F.R. §1.172**

Sir:

The Assignee of an undivided interest in the original patent identified above is Alpha Metals (Korea) Ltd. The Assignee consents to the above-identified application for a reissue patent. A statement under 37 C.F.R. §3.73(b) to establish ownership of the original patent is filed herewith. The undersigned is a person authorized to act on behalf of the Assignee.

Respectfully submitted,

ALPHA METALS (KOREA) LTD.

Date:

10/24/02

Name: Mark A. Dingley
Title: Secretary

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First-Named Inventor: Tang, Jie et al.
Assignee: Alpha Metals (Korea) Ltd.
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Reissue Serial No.: 09/827,605
Filed: April 6, 2001
Original Patent No.: 5,891,212
Original Issue Date: April 6, 1999

Box RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

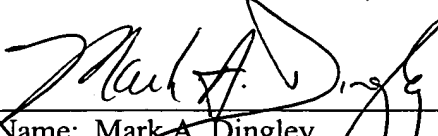
**ESTABLISHING RIGHT OF ASSIGNEE TO CONSENT
TO APPLICATION FOR REISSUE PATENT
UNDER 37 C.F.R. § 3.73(b)**

Sir:

The Assignee of the original patent identified above, Alpha Metals (Korea) Ltd., provides its consent to file the above-identified reissue application. To establish ownership of the original patent, enclosed herewith are copies of the assignment documentation as filed with the Assignment Branch of the U.S. Patent and Trademark Office for recordation of the Assignee's ownership of the original patent. The assignment documentation establishes the transfer of ownership of the original patent from the conveying party, Fry's Metals, Inc. d/b/a Cookson Semiconductor Packaging Materials to the Assignee, Alpha Metals (Korea) Ltd. The assignment documentation was recorded on April 22, 2002, at Reel/Frame No. 012865/0864

The undersigned is a person authorized to act on behalf of the Assignee.

Respectfully submitted,
ALPHA METALS (KOREA) LTD.


Name: Mark A. Dingley
Title: Secretary

Date:

10/24/02

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JULY 12, 2002

MINTZ, LEVIN, COHN ET AL.
CAROL H. PETERS
ONE FINANCIAL CENTER
BOSTON, MA 02111

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BOSTON
PATENT & TRADEMARK OFFICE

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/22/2002

REEL/FRAME: 012865/0864
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

FRY'S METALS, INC.

DOC DATE: 07/30/2001

ASSIGNEE:

ALPHA METALS (KOREA) LTC.
IRA 310, 1247-9 JUNGWANG-DONG
SILWA INDUSTRIAL COMPLEX, SHIHNG
CITY
KYUNGGI-DO, 429-450
REPUBLIC OF
KOREA

SERIAL NUMBER: 08931295
PATENT NUMBER: 5891212

FILING DATE: 09/16/1997
ISSUE DATE: 04/06/1999

SERIAL NUMBER: 09212555
PATENT NUMBER: 6083454

FILING DATE: 12/16/1998
ISSUE DATE: 07/04/2000

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012865/0864 PAGE 2

PEARLENE FOSTER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

Express Mail Label No. ET176335608US
Date of Deposit: April 22 2002

05-13-2002

Attorney Docket No. 17564-143

FORM PTO-1595

(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/99)



102087288

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Fry's Metals, Inc.
d/b/a Cookson Semiconductor Packaging Materials

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: July 30, 2001

2. Name and address of receiving party(ies)

Name: Alpha Metals (Korea) Ltd.

Internal Address:

Street Address:

IRA 310
Silwa Industrial Complex
1247-9 Jungwang-Dong
Sihung City
Kyunggi-do
429,450 Korea

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is _____

A. Patent Application No(s):

B. Patent No(s):

5,891,212
6,083,454

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence
Concerning document should be mailed:

Name: Carol H. Peters
Address: MINTZ, LEVIN, COHN, FERRIS
GLOVSKY and POPEO, P.C.
One Financial Center
Boston, MA 02111

6. Total number of patents involved: [2]

7. Total fee (37 CFR 3.41) \$80.00

- ☒ Enclosed
☐ The Commissioner is authorized to charge Deposit Account
No: 50-0311, Reference No. 17564-143.

DO NOT USE THIS SPACE

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Carol H. Peters, Reg. No. 45,010

April 22, 2002

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: [5]

05/10/2002 LMJELLER 00000066 5891212

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80.00 CP

Mail documents to be recorded with required cover sheet information to:

BOX ASSIGNMENT
Commissioner of Patents and Trademarks
Washington, D.C. 20231

TRA 1659289v1

ASSIGNMENT OF PATENTS AND PATENT APPLICATIONS

WHEREAS, Fry's Metals, Inc. d/b/a Cookson Semiconductor Packaging Materials), a corporation organized under the laws of the State of Delaware, U.S.A., having principal offices at 600 Route 440, Jersey City, New Jersey 07304 (hereinafter "Assignor"), is the owner of Letters Patents, Patent Applications, Inventions and Trade Secrets, which are specifically identified and listed in Schedule A, Schedule B and Schedule C, attached hereto, incorporated herein and made a part hereof.

WHEREAS, Alpha Metals (Korea) Ltd., a corporation organized under the laws of the Country of Korea, having offices at IRA 310, Silwa Industrial Complex, 1247-9 Jungwang-Dong, Sihung City, Kyunggi-do, 429,450 Korea (hereinafter ("Assignee"), is desirous of acquiring all of Assignor's right, title and interest in the Patents, Patent Applications, Inventions and Trade Secrets specifically identified and listed in Schedule A, Schedule B and Schedule C including it right to sue for and collect for past infringement thereof;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which by Assignor is hereby acknowledged, and intending to be legally bound hereby, the Assignor does hereby sell, assign, transfer and set over unto the Assignee its entire right, title and interest in and to, respectively, the Patents identified in Schedule A hereto, and any and all reissues and extensions thereof, including Assignor's right to sue for and collect damages and other recoveries for past infringement thereof; and the Patent Applications identified in Schedule B hereto, and any and all divisions, continuations and continuances-in-part thereof; the same to be held and enjoyed by the Assignee successors and assigns, as fully as the same would have been held and enjoyed by the Assignor had this Assignment not been made; and the Inventions and Trade Secrets identified in Schedule C hereto.

And for the consideration aforesaid, Assignor agrees that it will, upon request, execute and deliver to Assignee any and all additional papers and generally do all other and further lawful acts deemed necessary by said Assignee to carry out the terms of this Assignment.

EXECUTED this 31st day of July, 2001.

FRY'S METALS, INC.

By Peter A. Palmer

Title: VP Global Marketing

STATE OF New Jersey
COUNTY OF Hudson

The foregoing instrument was acknowledged before me in the City of Jersey City, this 31st day of July, 2001, by Peter A. Palmer (name), the VP Global Mktg (title) and _____ (name), the _____ (title) of Fry's Metals, Inc., a Delaware, USA Corporation on behalf of the corporation.

(seal)

Jean C. De Rosa
Notary Public
JEAN C. DeROSA
NOTARY PUBLIC OF NEW JERSEY
Commission Expires 1/13/2002

ALPHA METALS (KOREA), LTD.

By R. Ertmann
Title: EXECUTIVE VICE PRESIDENT

STATE OF New Jersey
COUNTY OF Hudson

The foregoing instrument was acknowledged before me in the City of Jersey City, this 31st day of July, 2001, by Richard Ertmann (name), the Executive VP (title) and _____ (name), the _____ (title) of Alpha Metals (Korea), Ltd., a Korean Corporation on behalf of the corporation.

(seal)

Jean C. De Rosa
Notary Public
JEAN C. DeROSA
NOTARY PUBLIC OF NEW JERSEY
Commission Expires 1/13/2002

SCHEDULE A – PATENTS

<u>PATENT NO.</u>	<u>ISSUE DATE</u>	<u>COUNTRY</u>	<u>SERIAL NO.</u>
US 5,891,212	04/06/99	U.S.A.	08/931,295
US 6,083,454	07/04/00	U.S.A.	09/212,555
TW 108208	11/01/99	Taiwan	87111398

SCHEDULE B – PATENTS APPLICATIONS

<u>COUNTRY</u>	<u>APPLICATION NO.</u>	<u>FILING DATE</u>	<u>PUBLICATION NO.</u>	<u>PUBLICATION DATE</u>
EPC	98925258.0	06/05/00	0996521	05/03/00
PCT	PCT/US98/11588	06/05/98		
China	98807037.5	06/05/98		
India	1090CAL98	07/14/98		
Japan	HEI11507149	06/05/98		
India	1090CAL98	07/14/98	Duplicate	
S. Korea	10-2000-7000390	06/05/98		
Singapore	9905518-8	06/05/98		